EPA Facility Identifier: 1000 0006 5895 Plan Sequence Number: 1000102113

Section 1. Registration Information

Source Identification

Facility Name: Swimming River Water Treatment Plant

Parent Company #1 Name: New Jersey American Water

Parent Company #2 Name: American Water

Submission and Acceptance

Submission Type: Re-submission

Subsequent RMP Submission Reason: 5-year update (40 CFR 68.190(b)(1))

Description: USEPA RMP - SRTP without O3

Receipt Date:25-Aug-2022Postmark Date:25-Aug-2022Next Due Date:25-Aug-2027Completeness Check Date:25-Aug-2022

Complete RMP: Yes

De-Registration / Closed Reason:

De-Registration / Closed Reason Other Text:

De-Registered / Closed Date:

De-Registered / Closed Effective Date:

Certification Received: Yes

Facility Identification

EPA Facility Identifier: 1000 0006 5895 Other EPA Systems Facility ID: 110000573996

Facility Registry System ID:

Dun and Bradstreet Numbers (DUNS)

Facility DUNS:

Parent Company #1 DUNS: 184814317

Parent Company #2 DUNS:

Facility Location Address

Street 1: 310 Swimming River Road

Street 2:

 City:
 Colts Neck

 State:
 NEW JERSEY

 ZIP:
 07722

ZIP4:

County: MONMOUTH

Facility Latitude and Longitude

Latitude (decimal): 40.317749 Longitude (decimal): -074.113002

Lat/Long Method: Interpolation - Satellite
Lat/Long Description: Plant Entrance (General)

Horizontal Accuracy Measure: 3

Horizontal Reference Datum Name: North American Datum of 1983

Source Map Scale Number:

EPA Facility Identifier: 1000 0006 5895 Plan Sequence Number: 1000102113

Owner or Operator

Operator Name: New Jersey-American Water Company

Operator Phone: (732) 747-6496

Mailing Address

Operator Street 1: 310 Swimming River Road

Operator Street 2:

Operator City: Colts Neck
Operator State: NEW JERSEY
Operator ZIP: 07722

Operator ZIP4:

Operator Foreign State or Province:

Operator Foreign ZIP: Operator Foreign Country:

Name and title of person or position responsible for Part 68 (RMP) Implementation

RMP Name of Person: Lindsey Olson

RMP Title of Person or Position: Sr. Manager Production

RMP E-mail Address:

Emergency Contact

Emergency Contact Name: Lindsey Olson

Emergency Contact Title: Sr. Manager Production

Emergency Contact Phone: (609) 226-0020 Emergency Contact 24-Hour Phone: (732) 747-6496

Emergency Contact Ext. or PIN:

Emergency Contact E-mail Address: Lindsey.Olson@amwater.com

Other Points of Contact

Facility or Parent Company E-mail Address:

Facility Public Contact Phone:

Facility or Parent Company WWW Homepage

Address:

Local Emergency Planning Committee

LEPC: Monmouth County LEPC

Full Time Equivalent Employees

Number of Full Time Employees (FTE) on Site: 28

FTE Claimed as CBI:

Covered By

OSHA PSM: Yes EPCRA 302: Yes

CAA Title V:

EPA Facility Identifier: 1000 0006 5895

Air Operating Permit ID:

OSHA Ranking

OSHA Star or Merit Ranking:

Last Safety Inspection

Last Safety Inspection (By an External Agency)

Date:

Last Safety Inspection Performed By an External

Agency:

17-Feb-2022

State environmental agency

Plan Sequence Number: 1000102113

Predictive Filing

Did this RMP involve predictive filing?:

Preparer Information

Preparer Name:

Preparer Phone:

Preparer Street 1:

Preparer Street 2: Preparer City:

Preparer State:

Preparer ZIP:

Preparer ZIP4:

Preparer Foreign State: Preparer Foreign Country:

Preparer Foreign ZIP:

Pennoni Associates Inc.

(856) 547-0505

515 Grove Street, Suite 1B

Haddon Heights NEW JERSEY

08035

Confidential Business Information (CBI)

CBI Claimed:

Substantiation Provided: Unsanitized RMP Provided:

Reportable Accidents

Reportable Accidents:

See Section 6. Accident History below to determine if there were any accidents reported for this RMP.

Process Chemicals

Process ID: 1000126761

Description: Water Treatment
Process Chemical ID: 1000158649

Program Level: Program Level 3 process

Chemical Name: Chlorine
CAS Number: 7782-50-5
Quantity (lbs): 44000

CBI Claimed:

Flammable/Toxic: Toxic

EPA Facility Identifier: 1000 0006 5895 Plan Sequence Number: 1000102113

Process NAICS

Process ID: 1000126761
Process NAICS ID: 1000128134

Program Level: Program Level 3 process

NAICS Code: 22131

NAICS Description: Water Supply and Irrigation Systems

Facility Name: Swimming River Water Treatment Plant

EPA Facility Identifier: 1000 0006 5895

Plan Sequence Number: 1000102113

Section 2. Toxics: Worst Case

Toxic Worst ID: 1000102472

Percent Weight:

Physical State: Gas liquified by pressure Model Used: EPA's RMP*Comp(TM)

Release Duration (mins): 10
Wind Speed (m/sec): 1.5
Atmospheric Stability Class: F
Topography: Urban

Passive Mitigation Considered

Dikes:

Enclosures: Yes

Berms: Drains: Sumps: Other Type:

EPA Facility Identifier: 1000 0006 5895 Plan Sequence Number: 1000102113

Section 3. Toxics: Alternative Release

Toxic Alter ID: 1000108827

Percent Weight:

Physical State: Gas

Model Used: EPA's RMP*Comp(TM)

Wind Speed (m/sec): 3.0
Atmospheric Stability Class: D
Topography: Urban

Passive Mitigation Considered

Dikes:

Enclosures: Yes

Berms:
Drains:
Sumps:
Other Type:

Active Mitigation Considered

Sprinkler System: Deluge System: Water Curtain: Neutralization: Excess Flow Valve:

Flares: Scrubbers:

Emergency Shutdown:

Other Type:

EPA Facility Identifier: 1000 0006 5895 Plan Sequence Number: 1000102113

Section 4. Flammables: Worst Case

EPA Facility Identifier: 1000 0006 5895 Plan Sequence Number: 1000102113

Section 5. Flammables: Alternative Release

EPA Facility Identifier: 1000 0006 5895 Plan Sequence Number: 1000102113

Section 6. Accident History

EPA Facility Identifier: 1000 0006 5895 Plan Sequence Number: 1000102113

Section 7. Program Level 3

Description

Swimming River Water Treatment Plant has a comprehensive prevention program which includes employee training, standard operating procedures, preventive maintenance, a scheduled hazard analysis, accident investigation procedures and emergency response. These measures are described in greater detail in the Executive Summary.

Program Level 3 Prevention Program Chemicals

Prevention Program Chemical ID: 1000137025
Chemical Name: Chlorine
Flammable/Toxic: Toxic
CAS Number: 7782-50-5

Process ID: 1000126761

Description: Water Treatment

Prevention Program Level 3 ID: 1000109227

NAICS Code: 22131

Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):

15-Aug-2022

Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA update):

05-May-2020

The Technique Used

What If: Checklist:

What If/Checklist:

Yes

HAZOP:

Failure Mode and Effects Analysis:

Fault Tree Analysis: Other Technique Used:

PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):

Major Hazards Identified

Toxic Release: Yes Fire: Yes

Explosion:

Runaway Reaction: Polymerization:

Overpressurization: Yes Corrosion: Yes

Overfilling: Contamination:

EPA Facility Identifier: 1000 0006 5895 Plan Sequence Number: 1000102113

Equipment Failure:

Yes

Loss of Cooling, Heating, Electricity, Instrument Air:

Earthquake:

Floods (Flood Plain):

Tornado: Hurricanes:

Other Major Hazard Identified:

Process Controls in Use

Vents: Yes Relief Valves: Yes

Check Valves: Yes Scrubbers: Yes

Flares:

Manual Shutoffs: Yes
Automatic Shutoffs: Yes
Interlocks: Yes
Alarms and Procedures: Yes

Keyed Bypass:

Emergency Air Supply:

Emergency Power: Yes

Backup Pump:

Grounding Equipment: Inhibitor Addition: Rupture Disks:

Rupture Disks: Yes

Excess Flow Device: Quench System: Purge System:

None:

Other Process Control in Use:

Mitigation Systems in Use

Sprinkler System:

Dikes:
Fire Walls:
Blast Walls:
Deluge System:
Water Curtain:

Enclosure: Yes Neutralization: Yes

None:

Other Mitigation System in Use:

Monitoring/Detection Systems in Use

Process Area Detectors: Yes

Perimeter Monitors:

None:

Other Monitoring/Detection System in Use: Personal monitors

Changes Since Last PHA Update

EPA Facility Identifier: 1000 0006 5895 Plan Sequence Number: 1000102113

Reduction in Chemical Inventory: Increase in Chemical Inventory: Change Process Parameters:

Installation of Process Controls:

Installation of Process Detection Systems: Installation of Perimeter Monitoring Systems:

Installation of Mitigation Systems:

None Recommended:

None:

Other Changes Since Last PHA or PHA Update:

Review of Operating Procedures

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures):

21-Dec-2021

Yes

Training

Training Revision Date (The date of the most recent 22-Aug-2017 review or revision of training programs):

The Type of Training Provided

Classroom: Yes
On the Job: Yes

Other Training:

The Type of Competency Testing Used

Written Tests: Yes
Oral Tests: Yes
Demonstration: Yes
Observation: Yes

Other Type of Competency Testing Used:

Maintenance

Maintenance Procedures Revision Date (The date of 22-Aug-2017 the most recent review or revision of maintenance procedures):

Equipment Inspection Date (The date of the most recent equipment inspection or test):

24-Aug-2022

24-Jun-2022

Equipment Tested (Equipment most recently inspected or tested):

Chlorine Evaporators

Management of Change

Change Management Date (The date of the most recent change that triggered management of change procedures):

EPA Facility Identifier: 1000 0006 5895 Plan Sequence Number: 1000102113

Change Management Revision Date (The date of the most recent review or revision of management of change procedures):

16-Aug-2022

Pre-Startup Review

Pre-Startup Review Date (The date of the most recent pre-startup review):

19-Oct-2016

Compliance Audits

Compliance Audit Date (The date of the most recent 15-Aug-2022 compliance audit):

Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit):

31-Dec-2022

Incident Investigation

Incident Investigation Date (The date of the most recent incident investigation (if any)):

09-Jun-2017

Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):

09-Jun-2017

Employee Participation Plans

Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans):

15-Aug-2022

Hot Work Permit Procedures

Hot Work permit Review Date (The date of the most 15-Aug-2022 recent review or revision of hot work permit procedures):

Contractor Safety Procedures

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures):

15-Aug-2022

Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance):

22-Jun-2022

Confidential Business Information

CBI Claimed:

EPA Facility Identifier: 1000 0006 5895 Plan Sequence Number: 1000102113

Section 8. Program Level 2

EPA Facility Identifier: 1000 0006 5895 Plan Sequence Number: 1000102113

Section 9. Emergency Response

Written Emergency Response (ER) Plan

Community Plan (Is facility included in written community emergency response plan?):

Yes

Facility Plan (Does facility have its own written

emergency response plan?):

Yes

Response Actions (Does ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)?):

Yes

Public Information (Does ER plan include procedures for informing the public and local agencies responding to accidental release?):

Yes

Healthcare (Does facility's ER plan include information on emergency health care?):

Yes

Emergency Response Review

Review Date (Date of most recent review or update 22-Dec-2021 of facility's ER plan):

Emergency Response Training

Training Date (Date of most recent review or update 22-Dec-2021 of facility's employees):

Local Agency

Agency Name (Name of local agency with which the Monmouh County LEPC facility ER plan or response activities are coordinated):

Agency Phone Number (Phone number of local agency with which the facility ER plan or response activities are coordinated):

(732) 409-7532

Subject to

OSHA Regulations at 29 CFR 1910.38: Yes OSHA Regulations at 29 CFR 1910.120: Yes Clean Water Regulations at 40 CFR 112: Yes RCRA Regulations at CFR 264, 265, and 279.52:

OPA 90 Regulations at 40 CFR 112, 33 CFR 154,

49 CFR 194, or 30 CFR 254:

Yes

Yes

State EPCRA Rules or Laws:

Other (Specify): New Jersey Toxic Catastrophe Prevention Act

EPA Facility Identifier: 1000 0006 5895 Plan Sequence Number: 1000102113

Executive Summary

New Jersey American Water is New Jersey's largest private water utility, providing drinking water to over 300,000 people. To disinfect this water, New Jersey American Water uses chlorine gas and ozone. In order to protect our neighbors New Jersey American Water has a comprehensive written risk management program in place. This program addresses all aspects of process safety from operations to emergency response.

The program starts with employee training. A new employee must first meet the basic job requirements before they are even considered for a job handling hazardous chemicals. After an individual is accepted into a position they undergo 90 days of on-the-job and classroom training. During the entire training process, written and verbal tests are administered to highlight any deficiencies in the training progress. At the end of this training period a comprehensive verbal test is administered to evaluate the associate. All associates continually attend annual refresher training to maintain their skills and knowledge.

Standard operating procedures (SOPS) have been developed for all processes involving chlorine and ozone. These procedures are taken directly from manufacturer's equipment manuals or recognized industry standards. The SOPs describe the normal operation of the equipment, any abnormal conditions and the response to this type of condition in order to bring the equipment back into normal operating parameters. All employees are trained on the SOPs and review them annually.

A comprehensive preventive maintenance program exists in order to assure the proper operation of the equipment. Every piece of chlorine and ozone equipment is included in the PM program. Equipment is inspected and maintained on a schedule based on manufacturer's recommendations or industry standards. In the absence of any written recommendations all equipment is inspected on an annual basis. Employees responsible for maintenance are trained on procedures before they are allowed to perform any work on the equipment.

A hazard analysis is conducted every 5 years to determine if there are any realistic release scenarios for the site. This analysis evaluates every possible leak location and what protective measures are in place or could be implemented to prevent such a release. The hazard analysis is done with individuals who are familiar with the equipment and work with it on a daily basis under the guidance of the responsible manager. Recommendations are reviewed internally for implementation.

Any change in policy, procedures and equipment goes through an exhaustive review before implementation. This review ensures that all aspects of the change are studied and understood before any modification of the system is undertaken. Corrections are made to SOPs, drawings, and the emergency response program and training is provided before the change is implemented to ensure that all operations are done properly with the new equipment. A procedure is also in place to guarantee that there is always someone in charge of the RMP program in the event of supervisory changes.

In the rare event that despite the above procedures there is a leak or release of chlorine or ozone, employees are trained in emergency response actions. Individuals first go to 40 hours of training in emergency response and chemical hazards. This training includes instruction on the proper personal protective equipment and tools to stop a release. Employees then attend an 8-hr. refresher class ever year to keep their skills sharp. Drills are held annually in to insure that the emergency response program works as it is designed. The drills are evaluated and if corrective actions needed they are implemented. The plan is distributed to the local emergency planning committees (LEPC) and they are invited to attend the drills.

Accident investigation procedures have been developed to determine the root cause of any release and to correct the cause as quickly as possible. The accident investigation is conducted by the responsible manager who will follow-up on any corrective actions necessary.

The risk management program is formally audited annually to ensure that there are no deviations from all the policies and procedures involved in the handling of chlorine and ozone.

There have not been any chlorine or ozone releases at the facility during the previous five years that resulted in significant on-site or offsite consequences.

There are no current planned changes to further improve safety at the facility.